Retinostemon group. "Retinostemon," as a section name, was coined by Planchon and Triana (1860) and has been frequently used since, although it was never validly published. This group is well supported in molecular analyses (Gustafsson & Bittrich, 2003; Gustafsson et al., 2007) and is widespread in the Neotropics, with the highest diversity in Central America and northwestern South America (Gustafsson et al., 2007). Morphological characters supporting a position in the Retinostemon group include a central resiniferous synandrium in staminate flowers, a relatively high number (eight to 10) of stigmata, a staminodial ring in pistillate flowers, and prominent, straight laticifers visible as white lines on the adaxial side of the leaf.

Although molecular analyses clearly support a position for *Clusia magnoliiflora* within the Retinostemon group, its precise phylogenetic relationship remains unclear. Numerous species that appear to belong in this group still remain to be formally described and sampled for molecular study. One of these, represented by a single fruiting specimen recently collected in a similar habitat lower down in the Marañón valley (*T. Sarkinen 3041*, E), may well turn out to be the closest relative of *C. magnoliiflora*. The two species are similar in having branches with nodal constrictions and globular fruits with distantly positioned stigmata; *C. magnoliiflora* differs in its broader stigmata, narrower leaves, and much shorter stature.

Paratypes. PERU. **Amazonas:** Marañón valley, on rd. to Lonya Grande 50 km from main rd. Bagua Grande–Chamaya, 9 July 2002, *M. H. G. Gustafsson 545* (AAU, USM). **Cajamarca:** prov. Jaén, by rd. to La Palma, 2 km from main rd. Jaen–San Ignacio, 11 July 2002, *M. H. G. Gustafsson 546* (AAU, USM).

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Literature Cited

Gustafsson, M. H. G. & V. Bittrich. 2003. Evolution of morphological diversity and resin secretion in flowers of *Clusia* L. (Clusiaceae): Insights from ITS sequence variation. Nordic J. Bot. 22(2): 183–203.

———, ——— & K. Winter. 2007. Diversity, phylogeny and classification of *Clusia*. Pp. 95–116 *in* U. Lüttge (editor), *Clusia*: A Woody Neotropical Genus of Remarkable Plasticity and Diversity. Ecological Studies, Vol. 194. Springer Verlag, Heidelberg.

Holtum, J. A. M., J. Aranda, A. Virgo, H. H. Gehrig & K. Winter. 2004. *d*13C values and crassulacean acid metabolism in *Clusia* species from Panama. Trees Struct. Funct. 18(6): 658–668.

IUCN. 2001. IUCN Red List Categories and Criteria, Version 3.1. Prepared by the IUCN Species Survival Commission. IUCN, Gland, Switzerland, and Cambridge, United Kingdom.

Planchon, J. E. & J. Triana. 1860. Mémoire sur la famille des Guttifères. Ann. Sci. Nat., Bot., ser. 4, 13: 306–376.

Nomenclatural Notes on the Morinaceae and Valerianaceae in China

Hong De-Yuan
State Key Laboratory of Systematic and Evolutionary Botany, Institute of Botany, Chinese
Academy of Sciences, Xiangshan, Beijing 100093, China.
hongdy@ibcas.ac.cn

ABSTRACT. Two new combinations in the Morinaceae are proposed for the *Flora of China*: *Acanthocalyx nepalensis* (D. Don) M. J. Cannon subsp. *delavayi* (Franch.) D. Y. Hong and *Morina ludlowii* (M. J. Cannon) D. Y. Hong. Lectotypes are designated for three names in the Valerianaceae, *Valeriana daphniflora* Hand.-Mazz., *V. stenoptera* Diels, and *V. stenoptera* var. *cardaminea* Hand.-Mazz.

Key words: China, Morinaceae, Valerianaceae.

Nomenclatural actions are needed for the forthcoming treatment of two families, the Morinaceae and Valerianaceae, for volume 19 in the *Flora of China*. The Morinaceae are represented by two genera (*Acanthocalyx* (DC.) Tiegh., *Morina* L.) and 10 species, all in western China. The Valerianaceae are represented by three genera (*Nardostachys* DC., *Patrinia* Juss., *Valeriana* L.) and 33 species throughout China, mostly in southwestern provinces or regions.

MORINACEAE

In the most recent taxonomic account for the Morinaceae in China (Hsing, 1986), only the one genus *Morina* with four species is treated. Based on examination of a large number of specimens including those in BM, E, and K, two genera and 10 species will be recognized in the forthcoming *Flora of China*, Volume 19, with four new species records for China from Tibet and Xinjiang, and the proposal for two new combinations is made here.

ACANTHOCALYX

1. **Acanthocalyx nepalensis** (D. Don) M. J. Cannon, Bull. Brit. Mus. (Nat. Hist.), Bot. 12(1): 12. 1984. Basionym: *Morina nepalensis* D. Don, Prodr. Fl. Nepal. 161. 1825. TYPE: Nepal. s.d., *N. Wallich 424* (holotype, K; isotypes, BM, E).

1a. **Acanthocalyx nepalensis** subsp. **nepalensis**.

1b. **Acanthocalyx nepalensis** subsp. **delavayi** (Franch.) D. Y. Hong, comb. et stat. nov. Basionym: *Morina delavayi* Franch., Bull. Soc. Bot. France 32: 8. 1885. *Acanthocalyx delavayi* (Franch.) M. J. Cannon, Bull. Brit. Mus. (Nat. Hist.), Bot. 12(1): 12. 1984. *Morina nepalensis* D. Don var. *delavayi* (Franch.) C. H. Hsing, Fl. Reipubl. Popularis Sin. 73(1): 51. 1986. *Morina nepalensis* D. Don subsp. *delavayi* (Franch.) D. Y. Hong & L. M. Ma, Vasc. Pl. Hengduan Mount. 2: 1931. 1994. TYPE: China. Yunnan: "In monte Hee-chan-men, prope Lan-kong," 2 June 1884, *Delavay 52* (holotype, P not seen).

According to Cannon and Cannon (1984: 11), the morphological differences between *Acanthocalyx delavayi* (Franch.) M. J. Cannon [≡ *A. nepalensis* subsp. *delavayi* (Franch.) D. Y. Hong] and *A. nepalensis* were the "corolla tube nearly glabrous beneath, straight" versus "hairy beneath, often somewhat curved," respectively, and the "ovary glabrous" versus "pubescent," respectively. However, based on examination of a large quantity of herbarium specimens, we found that discrete differences between them are a wider corolla (10–15 mm diam.) and a usually puberulous ovary in *A. delavayi* versus corollas 7–10 mm diam. and a usually glabrous ovary in *A. nepalensis*. These morphological differences are associated with geography, i.e., the above character states for *A. delavayi* are usually found in western Sichuan and northwestern Yunnan, while those for *A. nepalensis* are usually seen in material from southern Tibet, Bhutan, Nepal, and northern India. Therefore, given the evident geographic differences, the two taxa are better treated as two subspecies.

MORINA

1. **Morina ludlowii** (M. J. Cannon) D. Y. Hong, comb. nov. Basionym: *Cryptothladia ludlowii* M. J. Cannon, Bull. Brit. Mus. (Nat. Hist.), Bot. 12(1): 22. 1984. TYPE: Bhutan. Ju La, Mangbe Chu, 4250 m, *Ludlow, Sherriff & Hicks 16903* (holotype, BM; isotype, E).

Cannon and Cannon (1984) raised *Morina* sect. *Cryptothladia* Blume to generic rank, *Cryptothladia* (Blume) M. J. Cannon. Morphological differences between *Cryptothladia* and *Morina*, as indicated by Cannon and Cannon, were: (1) the corolla equal to or shorter than the calyx in *Cryptothladia* versus much

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